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5032FS

# United States Department of Agriculture, Bureau of Soils.

## ASSIGNMENT OF FIELD PARTIES.

The following assignments of field parties are made under the general letters of authorization (No. 36, July 1, 1905, and No. 987, December 14, 1905) issued to the Chief of the Bureau of Soils by the Secretary of Agriculture, and constitute a proper authorization to perform the travel and incur the expenses necessary to carry out such assignments:

On or about April 1 George N. Coffey will proceed from Washington, D. C., to the Tishomingo area, Indian Territory, the Oklahoma County area, Oklahoma, the San Marcos area, Texas, the Rusk County area, Texas, the Caddo Parish area, Louisiana, and the Prairie County area, Arkansas, for the purpose of studying the correlation of the soils of these areas, and will visit such other areas in the above States as may be necessary, in order to determine the relationships and the proper correlation of these soils. Upon the completion of this assignment he will return to headquarters.

H. J. Wilder and C. F. Shaw, upon the completion of their present area, will proceed from Caddo Parish, La., to Washington County, Ark., to survey a portion of Washington and Benton counties.

M. H. Lapham will leave Washington, D. C., on or about May 1 and proceed to Tehama County, Cal., to make a survey of the Redbluff area, located in Tehama and Glenn counties. A. T. Sweet will proceed from Washington, D. C., to Tehama County, Cal., in time to assist Mr. Lapham in the survey of the Redbluff area.

W. E. Tharp, upon the completion of his present assignment, on or about May 1, will proceed from Ware County, Ga., to Greene County, Ind., to make a survey of that county. C. J. Mann will proceed from Washington, D. C., to Greene County, Ind., in time to meet Mr. Tharp and assist in the survey of that county. At the same time M. E. Carr will proceed from Ware County, Ga., to Washington, D. C., for further assignment.

H. C. Smith will leave Washington on or about March 16 and E. L. Worthen on or about April 1, and each will proceed to Prairie County, Ark., where they will join W. T. Carter and F. N. Meeker in the survey of that county.

W. T. Carter and H. C. Smith, upon the completion of the survey of Prairie County, Ark., will proceed to Riley County, Kans., to make a survey of that county. At the same time F. N. Meeker will proceed from Prairie County, Ark., to headquarters in Washington for special assignment.

W. J. Geib, upon the completion of his present assignment, on or about May 1, will proceed from Lee County, Ala., to Cass County, Mich., to make a survey of that county. J. H. Barron will proceed from Washington, D. C., to Cass County, Mich., to join Mr. Geib in time to assist in this survey.

Frank Bennett and R. A. Winston, upon the completion of their present area, will proceed from Pontotoc County, Miss., to Lee County, Ala., to assist in the survey of that county, which will probably be finished about May 1. Mr. Bennett will then proceed from Lee County, Ala., to Madison County, Tenn., to make a survey of that county, after which he will begin the survey of Grainger County, Tenn. W. S. Lyman, upon the completion of the San Marcos area, will

proceed from Hays County, Tex., to Madison County, Tenn., to assist Mr. Bennett in the survey of that county. Upon the completion of Lee County R. A. Winston will proceed to Washington, D. C., for assignment to Soil Management Investigations.

H. H. Bennett, on or about May 1, will proceed from Washington, D. C., to Blue Earth County, Minn., for the purpose of making a survey of that county. L. A. Hurst, upon the completion of his present assignment, will proceed from Caddo Parish, La., to Blue Earth County, Minn., to assist in the survey of that county.

A. W. Mangum, upon the completion of his present assignment, on or about May 1, will proceed from Hays County, Tex., to Polk County, Minn., to make a survey of the Crookston area. He will be assisted in the survey of this area by F. C. Schroeder, who will leave Montgomery County, Miss., upon the completion of that area.

J. L. Burgess, upon the completion of his present assignment, on or about May 1, will proceed from Caddo Parish, La., to Lancaster County, Nebr., to make a survey of that county. He will be assisted in this survey by E. L. Worthen, who will proceed from Prairie County, Ark., to Lancaster County, Nebr., upon the completion of the former area.

C. N. Mooney and H. L. Westover will proceed from Washington, D. C., to Merrimac County, N. H., on or about May 1, to make a survey of that county.

A. M. Griffen, upon the completion of his present area, will proceed from Escambia County, Fla., to Madison County, N. Y., to make a survey of that county. He will be joined by Ora Lee, jr., who will proceed from Washington, D. C., to Madison County, N. Y., in time for this assignment.

E. O. Fippin, upon the completion of his present assignment at Cornell University, about June 1, will proceed from Ithaca, N. Y., to Niagara County, N. Y., to make a survey of that county. He will be joined by C. W. Mann, who is hereby directed to report in Niagara County, at his own expense, in time for this assignment.

W. E. Hearn, upon the completion of his present assignment, about May 1, will proceed from Lee County, Ala., to Chowan County, N. C., to make a survey of that county. He will be joined in Chowan County by a representative of the North Carolina Department of Agriculture, who will assist in the soil surveys to be made in that State during the coming season, and whose salary and expenses will be defrayed by the North Carolina Department of Agriculture.

T. D. Rice and O. L. Ayrs, upon the completion of their present assignment, will proceed from the Tishomingo area, Indian Territory, to Oklahoma County, Okla., to assist W. E. McLendon and G. B. Jones in the survey of that county. Upon the completion of that county, on or about May 1, T. D. Rice will proceed from Oklahoma County, Okla., to Williams County, N. Dak., to make a survey of the Williston area. He will be joined in that area by a representative of the North Dakota Economic Survey, whose salary and expenses will be defrayed by that organization. At the same time G. B. Jones and O. L. Ayrs will proceed from Oklahoma County, Okla., to Racine County, Wis., to make a survey of that county.

W. E. McLendon, upon the completion of the Oklahoma County area, is assigned to make a detailed survey of the Oklahoma Experiment Station farm at Stillwater, Okla. Upon the completion of this assignment, he will return to headquarters at Washington, D. C., for special assignment.

C. W. Ely will proceed on May 1 from Rusk County, Tex., to Ransom County, N. Dak., to make a survey of that county. He will be assisted in this survey by a representative of the North Dakota Economic Survey, whose salary and

expenses will be paid by that organization. A. E. Kocher will proceed on May 1 from Rusk County, Tex., to headquarters in Washington, D. C., for special assignment.

- T. A. Caine, upon the completion of his present assignment, on or about May 1, will proceed from Montgomery County, Miss., to Ohio County, W. Va., to make a survey of Ohio, Brooke, and Hancock counties, W. Va., and upon the completion of this area the party will survey Meigs County, Ohio. G. W. Tailby, jr., will proceed from Washington, D. C., to Ohio County, W. Va., in time to join Mr. Caine in this assignment.
- J. A. Drake and H. L. Belden, upon the completion of the survey of Escambia County, Fla., will return to headquarters in Washington, D. C., for further assignment. L. A. Kolbe will proceed from Escambia County, Fla., to Washington, D. C., to resume his former position in the Division of Soil Management.
- F. R. Pember and C. L. Cook will leave Ames, Iowa, about April 1 and report at headquarters in Washington, D. C. They will leave Washington about April 15 and proceed to Kingston, R. I., where they will establish temporary headquarters for the purpose of carrying on certain soil investigations under the direction of this Bureau in cooperation with the Rhode Island Experiment Station. J. E. McClintock will leave Washington, D. C., on or about April 15 and proceed to Ames, Iowa, where he will establish temporary headquarters, relieving Mr. Cook.

F. R. Reid, whose present temporary headquarters are at Ithaca, N. Y., will return to headquarters in Washington, D. C., upon the completion of his present assignment, which will be about April 15.

The necessary traveling and other expenses incurred in consequence of these assignments will be reimbursed upon the presentation of expense accounts, properly executed and supported by subvouchers, in accordance with the Fiscal Regulations of the Department. All travel performed under these assignments must be via the most direct and quickest routes available and at the lowest limited-fare rates. These assignments of Messrs. Pember, Cook, and McClintock to Kingston, R. I., and Ames, Iowa, being for periods exceeding thirty days at designated headquarters, their traveling and subsistence expenses in changing stations and for one day after reaching these points are authorized.

#### SOIL SURVEY.

JAY A. BONSTEEL, In Charge; GEORGE N. COFFEY, In Charge of Soil Classification and Correlation; GEORGE W. BAUMANN, In Charge of
Maps and Field Records.

#### Status of field work.

Approximate areas being surveyed during the winter season of 1905-6 and the proportion completed to date.

State.	Area.	Square miles.	Per cent com- pleted, Mar.10.	Party.
Alabama	Lee County	680	42	Hearn-Geib.
Arkansas	Prairie County.	658	41	Carter-Meeker.
Florida	Escambia County	680	50	Griffen-Kolbe-Drake-Belden.
Georgia	Waycross area	587	60	Carr, M.ETharp.
Indian Territory	Tishomingo area	440	83	Rice-Ayrs.
Louisiana	Caddo Parish	825	43	Burgess-Hurst-Wilder-Shaw.
Mississippi Do	Montgomery County Pontotoc County	400 498	60 71	Caine-Schroeder. Bennett, FWinston.
North Carolina .	New Hanover County	199	100	13
Oklahoma	Oklahoma County	720	60	McLendon-Jones.
Texas	San Marcos area Rusk County	500 915	71 29	Mangum-Lyman. Ely-Kocher.

# Areas to be surveyed during the summer of 1906.

State.	Area.	Square miles.	Party.	
Arkansas	Fayetteville area	500	Wilder-Shaw.	
California	Redbluff area1	500	Lapham, M. HSweet.	
Indiana	Greene County2	482	Tharp-Mann, C. J.	
Kansas	Riley County 2	604	Carter-Smith, H. C.	
Michigan	Cass County 2	500	Geib-Barron.	
Minnesota Do	Blue Earth County 2 Crookston area 2	756 500	Bennett, H. HHurst. Mangum-Schroeder.	
Nebraska	Lancaster County 2	868	Burgess-Worthen.	
New Hampshire	Merrimac County 2	921	Mooney-Westover.	
New York	Madison County 1 Niagara County 1	649 522	Griffen-Lee. Fippin-Mann, C. W.	
North Carolina	Chowan County2	161	Hearn.	
North Dakota Do	Ransom County 2 Williston area 2	864 500	Ely. Rice.	
Ohio	Meigs County2	435	Caine-Tailby.	
Tennessee	Madison County 2 Grainger County 1	545 309	Bennett, FLyman. Do.	
West Virginia	Wheeling area1	294	Caine-Tailby.	
Wisconsin	Racine County 1	323	Jones-Ayrs.	

<sup>&</sup>lt;sup>1</sup> Topographic sheet.

#### Miscellaneous.

- J. H. Barron, C. W. Mann, Ora Lee, jr., H. L. Westover, George W. Tailby, jr., and E. L. Worthen have been appointed assistants in the Soil Survey and will report for duty April 1.
- Jay A. Bonsteel is now making an inspection trip through certain of the Southern States, visiting the areas named in the last number of the assignment sheet.

<sup>&</sup>lt;sup>2</sup> Plane table to be used if reliable map can not be obtained.

On account of the press of work in the office, J. E. Lapham will probably not leave Washington before April 5 upon his trip in connection with a study of the limestone soils.

As will be seen from the table giving the status of the field work, it is obviously impossible to complete the survey of Rusk County, Tex., in time for the party working there to take up their northern area. It has been decided, therefore, to abandon the work in Rusk County on May 1, resuming field operations there again in the fall. All the other areas will be completed before the parties go to their new assignments. The parties engaged in the survey of the Oklahoma County, Okla., the Lee County, Ala., and the Prairie County, Ark., areas will be given assistance to enable them to complete their work by about May 1. In view of the present status of the work, as indicated in the first table on the preceding page, it is expected that with this assistance these areas will all be finished within the time specified, with the exception of Rusk County, Tex.

The Fayetteville area, which is to be surveyed in Arkansas during the coming summer, will comprise the southern half of the Fayetteville Quadrangle, U. S. G. S., and will include portions of Washington and Benton counties. The topographic map will be photographed to the usual scale.

The Redbluff area, California, embraces about 500 square miles of Tehama and Glenn counties, covered by the Vina and Tehama quadrangles, U. S. G. S., and includes some 350 square miles of fruit, grain, and grazing land, falling within the Sacramento Valley Project of the Reclamation Service, U. S. G. S.

The Crookston area will comprise about 500 square miles of the lands in the vicinity of Crookston, Polk County, Minn. In the survey of this area special attention will be given to any alkali problems which may be encountered.

The Williston area, North Dakota, will embrace about 500 square miles of the irrigated lands situated around Williston, in Williams County.

The Wheeling area consists of the three counties of Ohio, Brooke, and Hancock, which form the upper part of that portion of West Virginia lying between Ohio and Pennsylvania.

## Classification and correlation.

Since the last number of the assignment sheet was issued the following additional soil types have been encountered in some of the areas now being surveyed:

In Pontotoc County, Miss., F. Bennett has decided to separate the type which he called Pontotoc silt loam into two types, which he names Algoma clay and Algoma fine sandy loam. These soils appear to be related to the Lufkin series. In the Algoma clay the subsoil is nearer the surface than is usually the case in the Lufkin clay, but this soil will probably be correlated with that type. He describes the Algoma fine sandy loam as a light-gray, heavy, fine sandy loam 9 inches deep, underlain by a yellow or reddish-yellow silty clay.

From Montgomery County, Miss., T. A. Caine reports the Orangeburg fine sandy loam.

From Rusk County, Tex., C. W. Ely reports that the soil which he called Henderson silt loam can be correlated with the Lufkin clay.

From the San Marcos, Tex., area A. W. Mangum reports the Houston loam, Crawford clay, Tilmon fine sand, and Yazoo clay loam. The Tilmon fine sand can probably be correlated with the Norfolk fine sand. He describes the soil which he calls Yazoo clay loam as being lighter in texture than the Yazoo clay of other areas. The type Yazoo clay loam has not been recognized as yet, and the proper correlation of this soil will be decided upon later.

From Prairie County, Ark., W. T. Carter, jr., reports Yazoo (?) loam, La Grue clay, Wattensas clay, Wattensas fine sandy loam, Fairmont silt loam, and

Screeton silt loam. The soils of Prairie County appear to be related to the soils of southern Louisiana, but the exact correlation of the different types has not yet been decided upon.

From Oklahoma County, Okla., W. E. McLendon reports the Miller fine sand. From the Tishomingo, Ind. Ter., area T. D. Rice reports the Tishomingo sandy loam, Miller fine sandy loam, Miller silt loam, and Milburn fine sandy loam. He describes the Tishomingo sandy loam as a fine, very sandy loam 10 inches deep, containing a small percentage of gravel, underlain by a red or drab waxy clay with a small gravel content. The Milburn fine sandy loam is a fine, very sandy loam or loamy sand with an average depth of about 16 inches, underlain by a very sandy clay of a red or reddish-yellow color. The exact correlation of this type has not been determined upon. It appears to belong either in the Orangeburg or the Vernon series.

#### TOBACCO INVESTIGATIONS.

GEORGE T. McNess, In Charge.

The assignment of tobacco-investigation parties is as follows: W. M. Hinson and H. Weinberg at Palestine, Tex.; Otto Olsen at Nacogdoches, Tex.; Harry Rich at Hallettsville, Tex.; L. W. Ayer and R. S. Epley at Marion, Ala.; and G. B. Massey at Germantown, Ohio, engaged in growing, curing, and fermenting Cuban-seed filler tobacco; E. H. Mathewson and W. W. Green at Appomattox, Va., engaged in growing and curing heavy export tobacco; and J. B. Stewart and G. Harris at Tariffville, Conn., engaged in growing, curing, and fermenting shade wrapper tobacco.

The Texas, Alabama, Ohio, and Connecticut parties continue their plant-breeding experiments in cooperation with the Bureau of Plant Industry.

#### DIVISION OF SOIL MANAGEMENT.

FRANK D. GARDNER, In Charge.

- G. B. Maynadier, J. W. Nelson, L. C. Holmes, H. J. C. Umberger, H. O. Sampson, and Henry Winckelmann are in Washington, D. C., investigating manurial requirements of soils by the wire-basket method, Mr. Winckelmann being assigned to special work on the Arlington farm.
- J. C. Britton and J. J. Skinner are at Raleigh, N. C., investigating the manurial requirements of certain soils in cooperation with the North Carolina Experiment Station.
- F. R. Reid and O. L. Eckman are at Ithaca, N. Y., cooperating with the Cornell Experiment Station in investigating the manurial requirements of certain New York soils.
- B. E. Brown and F. D. Stevens are at Columbia, Mo., cooperating with the Missouri Experiment Station in studying the manurial requirements of certain Missouri soils.
- A. H. Snyder and C. L. Cook are at Ames, Iowa, cooperating with the Iowa Experiment Station in investigating the manurial requirements of certain Iowa soils.
- O. L. Eckman, at present located at Ithaca, N. Y., will be granted a furlough, at his own request, from April 1 to May 31.

#### DIVISION OF SOIL FERTILITY.

OSWALD SCHREINER, In Charge.

J. F. Breazeale, C. A. Jensen, A. T. Strahorn, C. J. Mann, and A. M. Jackson are at headquarters, engaged in laboratory work on general problems of soil fertility.

- J. F. Breazeale has completed the work at Ithaca, N. Y., and has returned to headquarters.
- A. M. Jackson was recently transferred from the Bureau of Plant Industry to the Bureau of Soils and assigned to laboratory work in this Division.

Dr. Schreiner has returned from his inspection trip to Ames, Iowa, and Columbia, Mo. At both places he delivered lectures before the students in agriculture on "Chemistry of the Soil" and "Fertility" problems.

# ALKALI LAND RECLAMATION.

CLARENCE W. DORSEY, In Charge.

W. W. Mackie is in charge of the reclamation tract at Fresno, Cal.; J. F. Warner is in charge of the reclamation tract at Tempe, Ariz.; and Rudolph Boss is in charge of the reclamation tract at Salt Lake City, Utah.

#### ADMINISTRATION.

# Expense accounts.

To facilitate the auditing of their accounts and perhaps obviate the necessity of returning them for correction of some slight errors, the field men should check very carefully the following questions before sending their expense accounts to headquarters:

Are both the original and duplicate properly certified and receipted?

Is the date of the expiration of the notary's commission, as shown on the account, subsequent to the date on which the oath was taken?

Does the total amount of the account *not supported by subvouchers* exceed \$2? If the amount does not exceed \$2, the notary's certificate should not be executed.

Are there any duplicate charges for board and lodging? If so, are they fully explained?

Are there duplicate charges for livery hire? If so, are they fully explained? In cases where two rigs are hired on the same date, one used by one member of the party and one by the other, that fact should be shown on the voucher. Where a rig is used on official business on a legal holiday, that fact should invariably be shown on the voucher.

Is the amount of the subvoucher shown in the receipt? Does the total amount of the subvoucher correspond with the amount as shown in the receipt?

MILTON WHITNEY, Chief of Bureau.

WASHINGTON, D. C., March 15, 1906.

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